

## ABSTRACT

The invention pertains to safety syringes and safety catheters designed to protect the operator from unintentional needle sticks and prevent fluid leakage after use. When the safety syringe is in operation, a plunger with an attached piston is pushed into the

5 cylindrical bore forcing fluid through the hollow body, the outlet portion, and out of the hollow needle. A needle shield fits slidably over the needle and a portion of the hollow body. The needle shield is a membrane sealed body. The needle shield's first position permits the needle's tip to extend outward from the shield through the membrane. When in

10 the second position, the needle shield extends beyond the needle's tip preventing any fluid loss. When the safety catheter is in operation, fluid passes from the flexible tubing through the hollow body, outlet portion, and out of the hollow needle. The hollow body includes a pair of wings to attach to the patient's skin. A needle shield fits slidably over the needle and a portion of the hollow body and includes a slot accommodating the attachable

15 wings. The needle shield is a membrane sealed body. The shield includes an internal membrane sealing against fluid loss through the wing slots. The needle shield's first position permits the needle's tip to extend outward from the shield through a membrane. When in the second position, the needle shield extends beyond the needle's tip preventing any fluid loss.